

OPERATIONAL PLAN

June 1, 1982

US EPA RECORDS CENTER REGION 5



412277

Milam Landfill- Drawing Number's OP-682-M and MW-6-82-M

The Milam Landfill has approximately 37 months remaining life based on FY 82 volume figures. The previously estimated life of 36 months from December 1981 has changed because incoming volume figured at that date was based on the FY 81 average volumes. There has been a 20% reduction of average incoming refuse volume between FY 81 and FY 82. The remaining volume does not include phase III. Presently the active fill area is in phase I with approximately 1 month life remaining in this area. Upon completion of the phase I area, the fill will be moved to phase II A. The fill will be brought to final elevation in the eastern and central areas in the phase II A. A notch will be left between phase I and Phase II A, for a wet weather area. After completing as much of phase II A to final as operationally feasible, which is expected to take 3 months, we will fill in the phase II B area. Phase II B has been partially filled. Operational problems necessitated surface water control measures in this area which resulted in nullifying the certification of the 10' clay liner in this area. Recertification should be a minor issue but will require some dozer work. Surface water controls will have to be addressed (Berming) in a supplemental permit application to be made by July 15, 1982. The fill in phase II B will cover the south half of the liner with a shallow walk-in type lifts to protect the liner. Then the fill will follow a pattern working into the phase II A slope. This fill sequence is intended to minimize the area requiring intermediate cover and also to minimize haul road maintenance to the fill. Upon completion of the south half of phase II B the fill will be shifted to north and filled the same way.

There is also the possibility of opening the old Milam landfill. However, it is premature at this time to discuss operational plans. The fill is another classic example of differential settlement problems and needs a well crowned lift or series of lifts to properly correct the drainage.

All cover material for Milam is from off site sources and intermediate will require 250,000 BCY and rough estimates for final are 200,000 BCY. Presently, cover is being brought from several sources, but mainly from the Lamear Tract. There are some other alternatives currently being worked on. All cover material is also required to be clay at this site. The Illinois has indicated that there can be further discussion on this issue, particularly concerning daily cover. No timetable has been set for pursuing this matter.

There are 12 monitoring well points and 2 surface monitoring points. Test parameters have not been defined for wells G135 and G136. Also, G136 has not been installed. There are 9 monitoring wells and 2 surface monitoring points are currently being sampled on a quarterly basis by Rhutasel and Associates.

EQUIPMENT LIST

<u>Quantity</u>	<u>Machine I.D.</u>	<u>Working Description</u>
1	Rex 3-70 Landfill Compactor	Cell Face
1	Terex 8230-B Dozer	Cell Face, grading
1	Terex 8230-B Dozer	Spreading cover
1	WABCO 666 Grader	Maintain haul roads
1	Cat 977 Crawler Loader	Material
		Surplus

Use also as alternate dozer at Chain of Rocks & Barton

2 Euclid 18 CYD Trucks

1 John Deere 690 Crawler-B/Hoe

Hauling cover
loading haul
ditching

The two Euclid 18 CYD off-road trucks and the John Deere backhoe will be utilized at any of the three landfills for loading and hauling requirements on a demand basis.

Log 237

APPLICATION FOR PERMIT

E. ST. LOUIS/SCA-MILAM

In order to clarify submittals made to the Land Permit Section, this document shall be utilized as page one of applications for Operating Permit and Supplemental Permit for site modification. This form is not to be used with applications for Development Permit and for Supplemental Permit to accept special waste (green forms).

December 13, 1982
date

Illinois Environmental Protection Agency
Land Permit Section
Division of Land/Noise Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Gentlemen: .

This is an application for

- ☐ Operating Permit
☐ Supplemental Permit to modify development
☒ Supplemental Permit to modify operation

for

Site Name: SCA - Milam

Site Address: Rte. 203

East St. Louis

Illinois 62201

County: St. Clair

RECEIVED

DEC 17 1982

E.P.A. - D.L.P.C.
STATE OF ILLINOIS

RECEIVED


DEC 23 1982

ILL. E.P.A. - D.L.P.C.
STATE OF ILLINOIS

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter III 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

KM
PMM/13/82

Signatures:

Site Operator: SCA Services, Inc. — Richard Kogler 

Operator Address: 1838 North Broadway
St. Louis, Missouri 63102
(314) 241-3710

Site Owner: Richard Kogler - SCA Services, Inc. *[Signature]*

Owner Address: 1838 North Broadway
St. Louis, Missouri 63102
(314) 241-3710

Engineer: Joseph J. Lisa, Jr., P.E. - RAS Associates

P.E. Reg. No.: 062-040644

Address: 9th & Cooper Streets
Camden, New Jersey 08101

Phone No.: (609) 541-7700

I hereby authorize RAS Associates
_____ to execute all permit application documents to the
Land Permit Section, Division of Land/Noise Pollution Control on my
behalf as site owner.

Signature K. K. R. I., Date 12-15-57

I hereby authorize RAS Associates
_____ to execute all permit application documents to the
Land Permit Section, Division of Land/Noise Pollution Control on my
behalf as site operator.

Signature [Signature], Date 12-15-82

SCA SERVICES, INC.

1838 N. BROADWAY
ST. LOUIS, MO. 63102
314-241-3710



November 30, 1982

Mr. Thomas E. Cavanagh, Jr.
Illinois Environmental Protection Agency
Division of Land Pollution Control
2200 Churchill Road
Springfield, IL 62706

Re: ~~SCA Services, Inc.~~
~~East St. Louis/SCA-Milam Landfill~~
~~St. Clair County, Illinois~~

Application for Supplemental Permit to
Modify Site Operation to Allow use of
Off-Site Borrow Area (dated 11-29-82)

Dear Mr. Cavanagh,

Please find enclosed a letter from RAS Associates concerning the above referenced application. It was inadvertently left out of the permit application package that we submitted to your office on 11-29-82. I would very much appreciate it if you could see that a copy of the RAS letter is attached to the application prior to its review.

Very truly yours,

Richard T. Kogler
Landfill Manager
Mid-Central Region

RTK/pb
Enclosure

RECEIVED
DEC 15 1982
ILL. E.P.A. - D.L.P.C.
STATE OF ILLINOIS

RECEIVED

DEC -2 1982
E.P.A. - D.L.P.C.
STATE OF ILLINOIS

associates

and Waste Management Consultants

November 19, 1982

Mr. Thomas E. Cavanagh, Jr.
Illinois Environmental Protection Agency
Division of Land Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Reference: SCA Services, Inc.
Application for Supplemental Permit to
Modify Site Operation to Allow Use of Off-Site
Borrow Area at St. Clair County, Illinois,
East St. Louis/SCA Milam Landfill

Dear Mr. Cavanagh:

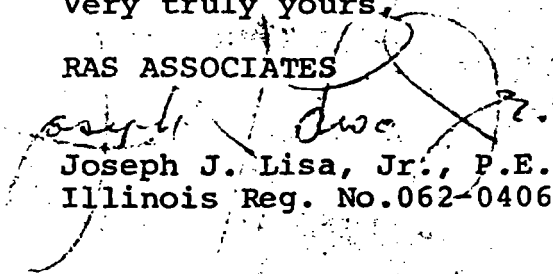
Our client, SCA Services, Inc., has requested that our office review the above referenced supplemental permit application to IEPA for modification of site operations at the SCA/Milam Landfill. After thorough examination of the application, we recommend that our client continue to pursue permit acquisition.

The data presented in the application shows the material available from the Mueller tract is of permeabilities in the 10^{-7} to 10^{-9} cm/sec. range. These are very good soils for use as cover material. Also, the site contains more than enough material to last the remaining life of the Milam Landfill, approximately 1,000,000 bank cubic yards.

If you have any questions regarding our recommendation to pursue permit application, please do not hesitate to call our office.

Very truly yours,

RAS ASSOCIATES


Joseph J. Lisa, Jr., P.E.
Illinois Reg. No. 062-040644

JJL/BKM/mk

RECEIVED

DEC -2 1982

**EPA — D.L.P.C.
STATE OF ILLINOIS**

Reutter Anderson Schoor Associates
Ninth & Cooper Streets • Camden • New Jersey 08101
609/541-7700

SCA SERVICES, INC.
CENTRAL LANDFILL DIVISION
North Central Regional Office
P. O. Box 34457
Louisville, Kentucky 40232



Application for Supplemental Permit to
Modify Site Operation to Allow Use
of Off-Site Borrow Area
at
St. Clair County, Illinois
East St. Louis/SCA-Milam Landfill

INTRODUCTION

The SCA-Milam Landfill located in Section 5, Township 2 North, Range 9 West in St. Clair County, Illinois no longer possesses sufficient reserves of on-site soils for use as daily, intermediate, and final cover. Suitable cover materials must, therefore, be obtained from off-site borrow areas. Currently, this cover is obtained from the Hart property under IEPA Supplemental Permit 1981-93. However, this property has a limited lifespan and new sources of cover are being sought.

Request is made through this application for a Supplemental Permit allowing the use of soils from portions of land located in the Southern Half of Section 32, Township 3 North, Range 9 West, in Madison County, Illinois. The property, consisting in total of 124.5 acres, is owned by William Nichols and will be referred to as the Mueller tract. This parcel of land lies directly to the northwest of the SCA-Milam site, bordered by the Cahokia Canal.

DEVELOPMENT AND OPERATION

The owner of the site, William Nichols, will also be responsible for all excavating and hauling of the cover material to the SCA landfill. A large track-type backhoe will excavate the soils at the site. The cover will then be hauled in dump trucks to the landfill. Materials designated as daily cover will be off-loaded near the active face. SCA dozers will push the cover onto the completed fill face, spreading and compacting it. Any excess cover will be stockpiled within 100 yards of the active fill. All excavated soils to be used as intermediate and/or final cover will be off-loaded adjacent to those areas of the landfill which have reached final elevation and are ready to be final covered.

Access between the borrow area, and the landfill will be across a bridge spanning the Cahokia Canal. Mr. Nichols will be responsible for construction of this bridge. In addition to this planned crossing, there exists access between the two sites via a county road. However, travel time using this route would be increased substantially and its use should prove unnecessary if the bridge alternative is utilized.

SCA involvement in the bridge will be limited to engineering and design assistance during the planning of the structure.

Experienced personnel will supervise the excavation and loading of soils at the borrow area to ensure that only clay and clayey silts are hauled to the landfill. In addition, all loads will be visually inspected as they are received at the Milam site. SCA will purchase the cover material on a tonnage basis, weighing all dirt hauling trucks in and out at the scale-house located on-site.

This excavation and hauling operation will take place during daylight hours (8:00 a.m. to 4:30 p.m.), 5 days a week, as weather permits. Operation of the landfill will continue as before and will not be affected by the off-site hauling and excavation.

VOLUME AND BORROW SITE LIFE

Although the Mueller tract, as a whole, consists of 124.5 acres, current plans call for approximately 80 acres to be developed as a borrow area. Excavating of this 80 acres to a average depth of 8 feet will conservatively give 1,000,000 bank cubic yards.

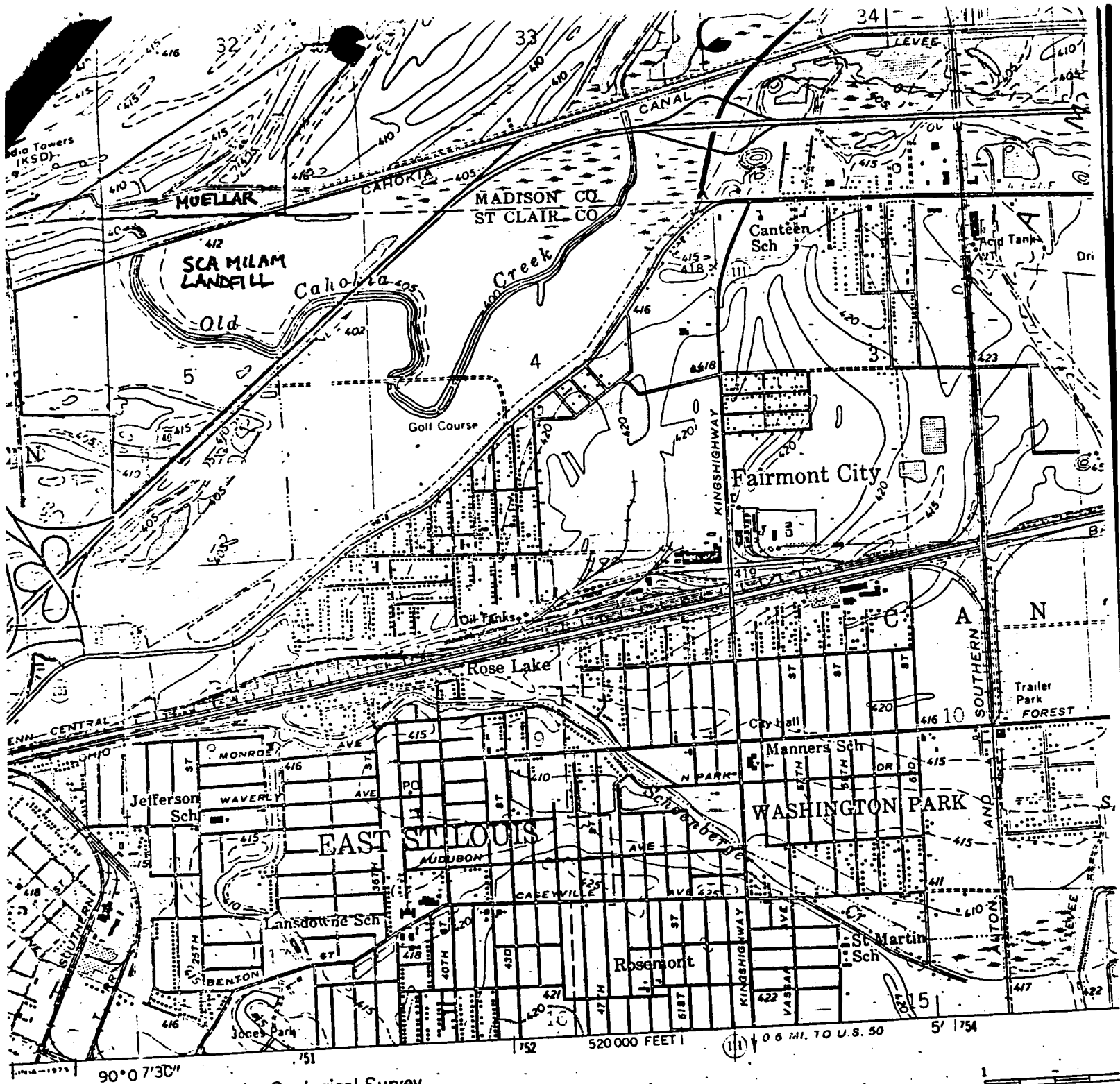
Currently, the SCA-Milam Landfill uses an average of 300 cubic yards for daily cover. If this borrow area were solely dedicated to daily cover needs, it would have a usable lifetime of approximately 11.2 years. However, the actual lifetime will be somewhat less as a portion of the excavated soil will be dedicated to final cover requirements. It is projected that this proposed borrow area will be sufficient for all daily, intermediate and final cover at the Milam Landfill.

SOILS DATA

A total of 9 test holes have been visually classified by John Mathes and Associates in the excavation areas. Additionally representative samples were taken of the cohesive materials for moisture density relationships, grain size distribution and permeabilities. Of the cohesive soils the clays, silty clays and silt loams are by far the most prevalent. Remolded

permeability tests reveal $5.7 - 8.7 \times 10^{-9}$ cm/sec permeability for the majority of the cohesive soils and 1.2×10^{-7} cm/sec permeability for a gray silt loam. Grain size distribution of the cohesive soils, show a clay content ranging from 15% to 53%. Maximum dry densities ranged from 85.7 PCF to 103.9 PCF.

Generally, the cohesive soils encountered, upon review of the test data, indicate very suitable materials for use as daily, intermediate and final cover.



Mapped by the Geological Survey
 Revised by the Army Map Service
 Published for civil use by the Geological Survey

Control by USGS and USC&GS

Topography from planetable surveys by the Geological Survey 1930

Planimetric detail revised from aerial photographs taken 1952

Field check 1953-1954

Polyconic projection. 1927 North American datum
 10,000-foot grid based on Illinois coordinate system, west zone
 1000-meter Universal Transverse Mercator grid ticks, zone 15,
 shown in blue

Ped tint indicates areas in which only landmark buildings are shown

UTM GRID AND 1974 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

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 AND
 A FOLDER

Y. ILL. - MO

007.5/7.5

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